



## Homework 1 Structure of the internet

1. Webpages are accessible by typing a URL into the address bar of a web browser, for example

<http://theimportanceofhomework.co.uk/hourseverynight.html>

- a. Using the example explain what the components of a URL are. [3]

- b. State what the Top Level Domain (TLD) is for this address [1]

- c. URLs rely on DNS. Explain how this system is used to determine the destination IP addresses of the required resource. [3]

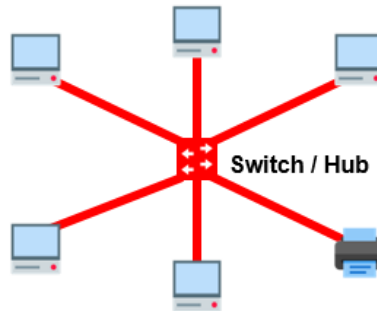
- d. Traditionally top-level domains were based on countries. As the Internet has expanded there have been several more top-level domains added.

How do local DNS servers know when new top-level domains are added? [4]

- e. Describe how the Internet and the World Wide Web are different [4]



2. What physical network topology is shown in the diagram below? [1]



3. Describe two advantages of using a star over a bus network topology. [4]

[Total 20 Marks]